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EXAMINER	
FABER, DAVID	

ART UNIT	PAPER NUMBER
2178	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/633,221	RAUE, KRISTIAN	
	Examiner	Art Unit	
	David Faber	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 November 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *27 December 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the application filed 1 August 2003.

This action is made Non-Final.

2. Claims 1-19 are pending. Claims 1, 7, 12, and 17 are independent claims.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 27 December 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 504, and 1211. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4, 8, and 14 are rejected under 35 U.S.C. 112, second paragraph, for using the term "substantially simultaneously" for being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Therefore, Examiner views the term being at the same time.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims appear to be claiming "software systems", which is computer program per se.

Section 2106 of the MPEP states:

> (a) Functional Descriptive Material: "Data Structures" Representing Descriptive Material Per Se or Computer Programs Representing Computer Listings Per Se
> Data structures not claimed as embodied in computer-readable media are descriptive

material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Computer programs are often recited as part of a claim. Office personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and **Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim.** See paragraph IV.B.2(b), below. When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim.

Since the computer program is not embodied on a tangible computer readable medium, they appear non-statutory.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-4, 7-8, 11-14, and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Waldau (US PGPub 2003/0226105, filed 5/29/2003, provisional application filed 5/29/2002).

As per independent Claim 1, Waldau discloses a method:

- analyzing a predefined spreadsheet logic; and (Paragraph 0021; Paragraph 0054: Discloses a parser that analyses the spreadsheet and recreates an internal representation of it.)
- deriving at least one source code module from the analyzed predefined spreadsheet logic. (Paragraph 0055-57; Paragraph 0083 : Discloses using a parser that generates a program suitable for the target computer environment, wherein the program is a programming language applicable in language listed in Paragraphs 0084-85. Compiler uses intermediate code for generating the code for the program (Paragraph 0055-57))

As per dependent Claim 2, Waldau discloses a method:

- storing results of the analyzing of the user-defined spreadsheet logic in an application metafile; and (Paragraph 0021; 0055: Compiler creates intermediate code from the internal representation after analyzing)

- deriving at least one source code module from the application metafile. (e.g. Paragraph 0055-57; 0072-78: Intermediate code is used for code generation of the program)

As per dependent Claim 3, Waldau discloses a method:

- generating an application frame configured to operate on a user input using the at least one source code module and the application metafile so as to generate an output in accordance with the user-defined spreadsheet logic. (FIG 9 – 10: Discloses two applications of using Waldau's converting method disclosed in FIG 1 wherein the compiler is disclosed in FIG 2. FIG 10 discloses a program, created from a spreadsheet, with a interface, based on FIG 9, presented in a cell phone. Paragraphs 0294-303 disclose information regarding user interfaces using Java and other languages.)

As per dependent Claim 4, Waldau discloses a method:

- application frame is configured to accept inputs from multiple users substantially simultaneously and to operate on the inputs using the at least one source code module and the application metafile so as to generate an output in accordance with the user-defined spreadsheet logic.(FIG 10 discloses an embodiment of its target computing environment with the use of the ability for one user to input data and receive an output. Furthermore, FIG 22 and Paragraph 0406 discloses the ability of transforming a spreadsheet

into a target computing environment, similar as shown in FIG 10, accessible by one or many end users at the same time. FIG 16-23 discloses additional embodiments of spreadsheet accessible to end users.)

As per independent Claim 7, Claim 7 recites similar limitation as in Claim 1 and is rejected under rationale. Furthermore, Waldau discloses a method:

- generating an application frame configured to operate on a user input using the at least one source code module (FIG 9 – 10: Discloses two applications of using Waldau's converting method disclosed in FIG 1 wherein the compiler is disclosed in FIG 2. FIG 10 discloses a program, created from a spreadsheet, with a interface, based on FIG 9, presented in a cell phone. Paragraphs 0294-303 discloses information regarding user interfaces using Java and other languages.)
- accessing the application frame by a first and a second user so as to generate an output in accordance with the user-defined application logic. (FIG 10 discloses an embodiment of its target computing environment with the use of the ability for one user to input data and receive an output. Furthermore, FIG 22 and Paragraph 0406 discloses the ability of transforming a spreadsheet into a target computing environment, similar as shown in FIG 10, accessible by one or many end users.)

As per dependent Claim 8, Waldau discloses a method:

- accessing is performed by the first and second users accessing the application frame substantially simultaneously. .(FIG 10 discloses an embodiment of its target computing environment with the use of the ability for one user to input data and receive an output. Furthermore, FIG 22 and Paragraph 0406 discloses the ability of transforming a spreadsheet into a target computing environment, similar as shown in FIG 10, accessible by one or many end users at the same time. FIG 16-23 discloses additional embodiments of spreadsheet accessible to end users.)

As per dependent Claim 11, Waldau discloses a method:

- accessing is performed via a network (FIG 16; Paragraph 0361: Discloses an embodiment where an end user using his Web browser to access an HTML/Javascript file from a web server. Paragraph 0362 discloses different methods of transferring data through a network.)

As per independent Claim 12, Waldau discloses a method:

- an application metafile including results of an analyzing of a user-defined spreadsheet logic; and (Paragraph 0021; 0055: Compiler creates intermediate code from the internal representation after analyzing.)
- at least one source code module derived from the application metafile. (e.g. Paragraph 0055-57; 0072-78: Intermediate code is used for code generation of the program)

As per dependent Claim 13, Claim 13 recites similar limitations as in Claim 3, and is similar rejected under Waldau.

As per dependent Claim 14, Claim 14 recites similar limitations as in Claim 4, and is similar rejected under Waldau.

As per dependent Claim 17, Claim 17 recites a "computer readable medium... application" for performing similar limitations as in Claim 1, and is similar rejected under Waldau.

As per dependent Claim 18, Claim 18 recites similar limitations as in Claim 2, and is similar rejected under Waldau.

As per dependent Claim 19, Claim 19 recites similar limitations as in Claim 3, and is similar rejected under Waldau.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 5, 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldau (US PGPub 2003/0226105, filed 5/29/2003, provisional application filed 5/29/2002).

As per dependent Claim 5, Waldau fails to specifically disclose the application frame is configured to store data associated with the multiple users in a central database. However, Waldau discloses in Paragraph 0406 that each of the users use the spreadsheet program, fill in the requested values, and send their values to system where it gathers information. It was well-known to one of ordinary skill to use a centralized database in order to gather and store incoming data for further operations.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined Waldau's method with the use of system containing a centralized database since it would have provided the benefit of storing data for record, security and use in future operations without obtaining the data from the original source.

As per dependent Claim 9, Claim 9 recites similar limitations as in Claim 5, and is similar rejected under Waldau.

As per dependent Claim 15, Claim 15 recites similar limitations as in Claim 5, and is similar rejected under Waldau.

12. Claims 6, 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldau (US PGPub 2003/0226105, filed 5/29/2003, provisional application filed 5/29/2002) in further view of Schumacher (US PGPub 2002/0099690, published 7/25/2002).

As per dependent Claim 6, Waldau fails to specifically disclose the application frame splitting data associated with the first and second users into reporting entities and grouping the data in a hierarchal consolidation tree so as to enable at least one of level-

based, user-based and user group-based aggregation of the data. However, Schumacher discloses a plurality of databases arranged in a hierarchy with a plurality of levels. (Paragraph 0049m lines 5-8) In addition, Schumacher discloses stores data information in a tree that aggregates certain kinds of data by group, system and/or user. (Paragraph 0051, lines 15-20)

It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined Waldau's method with Schumacher's method of hierarchical-level database(s) since Schumacher would have provided the benefit of the improvement of efficiency of reducing database size and network traffic within conventional systems.

As per dependent Claim 10, Claim 10 recites similar limitations as in Claim 6, and is similar rejected under Waldau and Schumacher.

As per dependent Claim 16, Claim 16 recites similar limitations as in Claim 6, and is similar rejected under Waldau and Schumacher.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Khosrowshahi et al (US Patent #6,766,512): Discloses generating a structured language model from a spreadsheet model.
- Sorge et al (US Patent #6,691,281): Discloses publishing a spreadsheet into an HTML document without losing its formatting or functionality.

- Sorge et al (US Patent #6,613,098): Discloses saving a spreadsheet into an HTML document without losing its formatting or functionality.
- Rubin et al (US PGPub 2003/0106040): Discloses transforming a spreadsheet into a software development language.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached on M-F from 8am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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